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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,329	12/12/2003	Yu-Yu Chen	MR2863-139	9062
4586	7590	06/16/2006	EXAMINER	
ROSENBERG, KLEIN & LEE 3458 ELLICOTT CENTER DRIVE-SUITE 101 ELLICOTT CITY, MD 21043			NGUYEN, KIMNHUNG T	
			ART UNIT	PAPER NUMBER
			2629	

DATE MAILED: 06/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/733,329

Applicant(s)

CHEN, YU-YU

Examiner

Kimnhung Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. ____.  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____.   | 6) <input type="checkbox"/> Other: ____.                                    |

### DETAILED ACTION

This application has been examined. The claims 1-6 are pending. The examination results are as following.

#### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3 and 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lai (US 6,323,841) in view of Wilson (US 5,540,235).

As to claim 1, Lai discloses in figS.1A-1B, a computer cursor pointing device (computer mouse, see abstract) comprising: a casing (housing) having a top surface and a cavity therein, when using the mouse, the palm will contact this soft pad and have a feeling of softness due to the resilience of the soft pad, and thus is not liable to be fatigued (see col. 2, lines 34-36).

However, Lai does not disclose a first electrode mounted at the top surface of the casing; a second electrode, which is mounted at the top surface of the casing and is close (near) to the first electrode with a distance, the second electrode being electrically insulated from the first electrode, and an electronic stimulator circuit for generating a pair of stimulating signals to the first electrode and the second electrode respectively, and the stimulating signals from the stimulator circuit are transmitted to the first electrode and the second electrode to perform an electric stimulation to the use's hand.

Wilson discloses a neurophysiological monitoring system in figs. 1A, 3, 3A and 6, having a first electrode (37) mounted at the top surface of casing (housing 33); a second electrode (33), which is mounted at the top surface of the casing (33) and is close to (near) the first electrode with a distance, the second electrode (37) being electrically insulated from the first electrode (because each electrode has different position), and an electronic stimulator circuit (7) for generating a pair of stimulating signals to the first electrode and the second electrode respectively (because Wilson discloses a pair of standard sockets 37 allow to use of specialized stimulating electrodes not shown, see col. 6, lines 49-50), and the stimulating signals from the stimulator circuit are transmitted to the first electrode and the second electrode to perform an electric stimulation to the human hand (see fig. 3 and 6, see col. 6, lines 42-54).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the and an electronic stimulator circuit for generating a pair of stimulating signals to the first electrode and the second electrode respectively, and the stimulating signals from the stimulator circuit are transmitted to the first electrode and the second electrode to perform an electric stimulation to the patent as taught by Wilson into the computer mouse pointing device of Lai for producing the claimed invention because this would provide the stimulation required to elicit the required nerve or muscle response to the user (see col. 4, lines 62-64) with specialized stimulating electrodes, such as ring electrodes for fingers, needle electrodes for deep stimulation, and bar electrodes for tight areas (see col. 6, lines 49-52).

As to claim 3, Lai does not disclose further, wherein the first electrode is mounted at recess formed at the top surface of the casing.

Wilson discloses in fig. 3, the first electrode (37) is mounted at a recess formed at the top surface of the casing (housing 33).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to implement the first electrode is mounted at a recess formed at the top surface of the casing as taught by Wilson into the computer mouse of Lai for producing the claimed invention because this would provide the stimulation required to elicit the required nerve or muscle response to the user (see col. 4, lines 62-64) with specialized stimulating electrodes, such as ring electrodes for fingers, needle electrodes for deep stimulation, and bar electrodes for tight areas (see col. 6, lines 49-52). Claim 2 depends on claim 1, and is rejected on the same reasons on claim 1.

As to claim 6, Lai discloses the computer mouse having massaging function (fig. 5) having a power circuit for the motor (211), a dry cell (25), a contact (26) and spring-leaf contact (27) are connected together in series, the contact (26) is controlled by switch (floating button 23), when slightly pressing the massaging head (21), the spring-leaf contact (27) will contact with each other and thus the circuit is closed, and the motor (211) can operate to transfer the vibration massager to the user (see col. 3, lines 29-39).

However, Lai does not disclose that the casing is provided with a regulating switch for regulating an intensity of the stimulating signals.

Wilson discloses in figs. 3, 3A, 3B, an activation switch (34) by a pre-programmed triggering signal from computer through timing line (27), when a stimulus is delivered to patient (13) and the strength and duration of stimulus is adjusted by regulator (35) and control switch (39) respectively for the operator (see col. 7, lines 8-20).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the strength and duration of stimulus is adjusted by regulator and control switch respectively for the convenience of the operator as taught by Wilson into the computer mouse having massaging function of Lai for producing the claimed invention because this would provide a power line through a cable, and the required stimulus can be delivered by electrodes, and when a stimulus is delivered to patient, a timing signal is sent through timing line to initiate the signal processing electronics of primary module for the convenience of the operator (see col. 7, lines 7-20). Claim 3 depends on claim 1, and is rejected on the same reasons on claim 1.

3. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lai (US 6,323,841) and Wilson (US 5,540,235) as applied to claim 1 above, and further in view of Ohuchi et al. US (2003/0092219).

As to claim 2, Lai and Wilson discloses a computer mouse pointing device with electric stimulator and comprising the first and second electrodes mounted on the top surface of the surface as discussed above. However, they do not disclose that wherein the first electrode is spherical in structure and protrudes at a predetermined distance from the top surface of the casing.

Ohuchi et al. discloses in fig. 1A, a semiconductor device comprising a plurality of electrodes (solder ball 107), every single electrode is spherical in structure and protrudes at a predetermined distance from the top surface of semiconductor device (see 0026).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the single electrode is spherical in structure and protrudes at a predetermined distance from the top surface of semiconductor device as taught by Ohuchi et al.

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into the computer mouse pointing device with electric stimulator and comprising the first and second electrodes mounted on the top surface of the casing of by Lai and Wilson for producing the claimed invention because this would provide as a metallic electrode is bonded with the topmost surface and the side wall face of each of the posts and exposed out of the resin (see Ohuchi et al., see [0026]), which is more easier to contact with the human hand. Claim 2 depends on claim 1, and is rejected on the same reasons on claim 1.

4. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lai (US 6,323,841) and Wilson (US 5,540,235) as applied to claim 1 above, and further in view of Mieda et al. (US 2004/0149051).

As to claim 4, Lai and Wilson disclose the pointing device of mouse as discussed above. However, Lai and Wilson do not disclose that wherein the second electrode is ring shape and surrounds the first electrode, the second electrode being insulated from the first electrode by means of an insulating annulus.

Mieda et al. discloses a pressure point detector in fig. 5B, having the second electrode (131b) is ring shape (see flat-ring shaped electrode 131b, see [0029]) and surrounds the first electrode (131a), the second electrode (131b) being insulated from the first electrode (131a) by means of an insulating annulus (resistance film 151 on the insulation member 101, see [0038-0039]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the having the second electrode is ring shape and surrounds the first electrode, the second electrode being insulated from the first electrode by means of an resistance film on the insulation member as taught by Mieda et al. into the pointing device mouse with

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electric stimulator of Lai and Wilson for producing the claimed invention because this would provide to the system such an unwanted contact between the electrodes can be avoided by incorporating an insulation film on the surface of the electrodes, and thus, the electrodes will not electrically contact with one another (see [0038]). Claim 4 depends on claim 1, and is rejected on the same reasons on claim 1.

As to claim 5, Lai and Wilson disclose the pointing device of mouse as discussed above. However, Lai and Wilson do not disclose that wherein the second electrode has a flat structure and surrounds the first electrode, the second electrode being insulated from the first electrode by means of an insulating annulus.

Mieda et al. discloses a pressure point detector in fig. 5B, having a second electrode (131b) has a flat structure (see flat-ring-shape electrode 131b, see [0029]) and surrounds a first electrode (131a), the second electrode (131b) being insulated from the first electrode (131a) by means of an insulating annulus (resistance film 151 on the insulation member 101) (see [0038-0039]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the having the second electrode has a flat structure and surrounds the first electrode, the second electrode being insulated from the first electrode by means of an resistance film on the insulation member as taught by Mieda et al. into the pointing device mouse with electric stimulator of Lai and Wilson for producing the claimed invention because this would provide to the system such an unwanted contact between the electrodes can be avoided by incorporating an insulation film on the surface of the electrodes, and thus, the electrodes will not



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electrically contact with one another (see [0038]). Claim 5 depends on claim 1, and is rejected on the same reasons on claim 1.

*Correspondence*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimnhung Nguyen whose telephone number is (571) 272-7698. The examiner can normally be reached on MON-FRI, FROM 8:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe can be reached on (571) 272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Kimnhung Nguyen  
Patent Examiner  
June 9, 2006